

REMARKS/ARGUMENTS

Claims 1-6 are pending in the application. Claims 1 and 3 have been amended to correct an informality as suggested on pages 2 and 3 of the Official Action. Claims 5 and 6 have been added. Claims 5 and 6 contain the same limitations of Claims 1 and 2 but without the means plus function language. No new matter has been added.

By way of summary, the Official Action presents the following issues. The Information Disclosure Statement filed on November 14, 2005 was objected to on the basis that no legible copies of the references were provided. In the Official Action, it was requested that an English translation of the entire reference or to the very least, the Abstract needs to be submitted in order for the reference to be considered under 37 C.F.R. § 1.98(a)(3)(ii). Claims 1-4 were objected to because of an informality. Claims 1-4 were rejected under 35 U.S.C. § 102(a) as being anticipated by Applicants' specification, pages 1-3. Turning to the objection to the IDS, the IDS was correct as filed. The Statement of Relevancy meets the MPEP §609 requirements.

Turning next to the objection to Claims 1 and 3 as containing informalities, Claims 1 and 3 have been amended to recite "Phase Locked Loop (PLL)" as suggested in the Official Action. Turning next to the rejection of Claims 1-4 under 35 U.S.C. 102(a) as being anticipated by Applicants' specification, Applicants respectfully traverse this rejection for the reasons which follow.

The reasoning provided for the rejection of Claims 1-4 can be found on pages 3 and 4 of the Official Action. The Applicants' specification relied upon in the Official Action discusses one of the methods of monitoring the frequency of the read clock. The Applicants' specification describes "monitoring a state of consistency of a pulse based on an edge of an N-divider signal of the write clock and a pulse based on an edge of an N-divider signal of the read clock. When discrepancies between the two pulses continue for a predetermined number

of times, the frequency of the read clock is deemed to be inappropriate and a transition is made to a read clock NG status.” It is further described that “when matches between the two pulses continue for a predetermined number of times during a NG status, the frequency of the read clock is deemed to have returned to an appropriate condition, and the status is returned to a read clock OK status.” See page 2, line 14 through page 3, line 2. From the above passages, it is clear that when discrepancies between the two pulses continue for a predetermined number of time, the frequency of the clock goes to NG status and that when matches between the pulses continue for a predetermined number of times during NG status, the frequency of the clock returns to an OK status. Thus, the change in status is based on discrepancies between the pulses for a predetermined period of time when in OK status and matching of the pulses for a predetermined period of time when in NG status.

However, the specification (page 14) recites that “if status determination is performed based solely on the frequency difference between the read clock RCK and the write clock WCK, as is conventional, problems such as an excessive NG determination or destabilization of status determination may occur. Therefore, in the disk drive device 1 according to the present invention, a more stable status determination, as compared to conventional methods, is achieved by taking into consideration the operational status of the signal processing circuit in subsequent stages.”

Thus, it is clear that status determination based solely on the frequency difference between the read clock and the write clock as found in the specification, results in problems of excessive NG determination or destabilization of status determination. In contrast, Applicants’ invention is achieved by taking into consideration the operational status of the signal processing circuit in subsequent stages. Specifically, as stated on page 20 of Applicants’ specification:

by having the state determination circuit 44 maintain an OK status as long as a frame sync is detected, or in other words, as long as signal processing is normally performed, and make a transition to a NG status only when no frame sync is detected and the cumulative count difference value SdN exceeds the NG threshold M, a status determination which takes into consideration the reproduction operation of the entire disk drive device 1 is achieved, thereby preventing excessive NG determination.

Accordingly, it is clear that in Applicants' invention, in addition to the frequency difference being detected, the state determination circuit 44 also uses frame sync signal SS outputted from encode/decode section 31. As result, both features are taken into consideration in Applicants' invention.

Claim 1, as originally filed, recites, *inter alia*, "a frequency monitoring means which monitors whether or not the frequency of the read clock is normal based on the frequency difference and the processing status information. Claim 1 further recites that "the frequency monitoring means ... makes a transition to a NG status indicating that the frequency of the read clock is abnormal when the processing status information is indicating an abnormal status and the difference of the frequencies exceeds a first threshold; and returns to an OK status when the difference of the frequencies is below a second threshold during the NG status."

From all of the above, Claim 1 requires more than frequency monitoring based on a frequency difference or frequency match between the two signals. Because Claim 1 also recites that the monitoring is based on the processing status information, Claim 1 is not anticipated by information set forth on pages 1-3 of the specification. Independent Claim 3 is also not anticipated for the same reasons as Claim 1. In addition, dependent Claims 2 and 4 are not anticipated because of their dependency from Claims 1 and 3 and because the specific language of the claims regarding the pulses is not found in the portions of the specification relied upon in the rejection.

From all of the above, Applicants the rejection of Claims 1-6 under 35 U.S.C. § 102(a) based on the information set forth in Applicants' Background Art is not well founded and should be withdrawn.

Claims 1-4 are now believed to be in condition for allowance. An early indication to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
Bradley D. Lytle

Attorney of Record  
Registration No. 40,073

Stuart S. Levy  
Registration No. 61,474

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)